

EXHIBIT 3

EXPLANATION OF SIGNIFICANT DIFFERENCES

Parcel B, Hunters Point Shipyard Site San Francisco, California

August 24, 1998

I. Introduction

This Explanation of Significant Differences ("ESD") is for a change to the remedy selected in the Record of Decision for Parcel B, Hunters Point Shipyard dated October 7, 1997 ("Parcel B ROD"). The selected remedy for Parcel B included the excavation of contaminated soils to the groundwater table, offsite disposal of the excavated soils, groundwater monitoring to ensure protection of San Francisco Bay from contaminated groundwater and institutional controls prohibiting all uses of groundwater and governing handling of any residual contaminated soils.

Hunters Point Shipyard (the "Site") is a deactivated Naval base located in San Francisco, California. In 1989, the Site was placed on the National Priorities List ("NPL") and in 1991 was selected for closure under the Base Realignment and Closure ("BRAC") program. The lead agency for investigation and cleanup of the Site is the United States Navy ("Navy"). The lead support agency is the United States Environmental Protection Agency, Region IX ("EPA"). State support agencies include the California Environmental Protection Agency, Department of Toxic Substances Control ("DTSC") and the Regional Water Quality Control Board ("RWQCB").

Preparation and public notice of this ESD is required pursuant to section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA" or "Superfund"), 42 U.S.C. section 9671(c). This ESD will become part of the Administrative Record for the Site. The Administrative Record is available for review at two information repositories: the Anna E. Waden Branch Library located at 5075 Third Street in San Francisco; and, the City of San Francisco's Main Library located at 100 Larkin, during normal library hours.

In the Parcel B ROD, the Navy's selected remedy for contaminated soils located on Parcel B was excavation to the groundwater table followed by offsite disposal. The depth to groundwater below Parcel B was believed to typically occur at 10 feet below ground surface ("bgs"). However, in early 1998, fieldwork on the Site indicated that the depth to groundwater beneath Parcel B could be as shallow as 2.3 feet bgs. This ESD revises the selected remedy of the Parcel B ROD to require cleanup of contaminated soils to a cleanup level of 10^{-6} cancer risk (residential) or to a maximum depth of 10 feet bgs instead of to the groundwater table to ensure that the Parcel B remedy is protective of human health and the environment.

II. Summary of Site History and Selected Remedy

The Site is a deactivated shipyard located in southeastern portion of San Francisco, California, adjacent to San Francisco Bay. In 1940, the Navy obtained ownership of the shipyard for ship building, repair and maintenance activities. After World War II, activities shifted from ship repair to submarine servicing and testing. Between 1976 and 1986, the Navy leased most of the Site to Triple A, a private ship-repair company. The Site was an annex of Naval Station Treasure Island until March 1994 when the Navy's Engineering Field Activity West in San Bruno, California assumed management of it. The Site consists of 936 acres, 493 on land and 443 under water in San Francisco Bay.

In 1987, contamination was confirmed at a number of Site locations. This finding, combined with the proximity to an off-site drinking water source (the aquifer used by the Albion Springs water bottling company), resulted in the EPA placing the Site on the National Priorities List ("NPL"), in 1989. In 1991, the Department of Defense listed the Site for closure.

In January 1992, the Navy, the EPA, DTSC and RWQCB entered into a Federal Facilities Agreement to better coordinate the environmental investigation and cleanup of the Site. To expedite the investigation and cleanup, the Site was divided into six parcels. Each of the six parcels was assigned a letter to it, ranging from A to F. Parcel F is an offshore parcel. Fieldwork has been completed for all six parcels. The fieldwork showed that the soils and groundwater of the Site are contaminated with a variety of hazardous substances including metals, polychlorinated biphenyls ("PCBs"), volatile organic compounds ("VOCs"), semi-volatile organic compounds ("SVOCs"), polyaromatic hydrocarbons ("PAHs"), and pesticides. In addition, total petroleum hydrocarbons (TPH) are present in Parcel B soil and groundwater. A no-action Record of Decision was signed for Parcel A in November 1995. Little contamination was detected on Parcel A and Navy intends to transfer Parcel A to the City of San Francisco in Fiscal Year 1999. Remedial investigations and feasibility studies continue for Parcels C through F. A number of non-time critical removals have also been completed at the Site. All six parcels are scheduled to reach final remedy decisions by the end of 1999 and upon cleanup be transferred to the City of San Francisco.

In the Parcel B ROD, with regard to contaminated soils the Navy selected excavation and offsite disposal as the final remedy. The major components of the selected remedy for the Parcel B contaminated soils are:

- o Excavation of contaminated soil to the groundwater table or to a 10^{-6} excess lifetime cancer risk (residential).
- o Offsite disposal of the contaminated soil.
- o Placement of clean backfill in the excavated areas.
- o Deed notification that soil below the groundwater table in remediated areas may be contaminated.
- o Institutional controls governing handling of residual contaminated soils.

The ROD also requires that the groundwater be monitored for up to 30 years to ensure that contamination plumes do not impact the San Francisco Bay and so that VOC contamination present at IR-10 does not result in air pathway exposures at unacceptable levels. In addition, steam and fuel lines are to be removed, the storm drains are to be lined and pressure grouted as appropriate and all future uses of groundwater will be prohibited by a deed restriction. This ESD addresses only the soil portion of the Parcel B selected remedy.

III. Description of Significant Differences and the Basis for those Differences

During the remedial investigation for Parcel B, human health risks posed by Parcel B soils were evaluated to a depth of 10 feet. This depth was selected because residential construction scenarios (house foundations, swimming pools, etc.) typically occur at depths of 10 feet or less. In addition, the proposed reuse plan for Parcel B includes utilities at 8 feet bgs. Finally, the community expressed an interest in growing produce on Parcel B in conjunction with residential reuse.

Early drafts of the Parcel B ROD required cleanup of contaminated soils to a depth of 10 feet. The depth to groundwater beneath Parcel B was believed to average from 8 to 10 feet bgs. In one of the final drafts, the Parcel B ROD was revised to include language requiring cleanup to the groundwater table. Since remedial investigation and feasibility study data indicated that the average depth to groundwater was 8 to 10 feet bgs, the change to the selected remedy appeared to be minimal so the revision was included in the Parcel B ROD.

After the Parcel B ROD was signed in 1997, the Navy took groundwater measurement levels in early 1998 in the vicinity of several Parcel B installation restoration ("IR") sites as part of a soil gas treatability study. These were the first groundwater measurement levels taken on Parcel B since 1995. The water level measurements found that groundwater beneath Parcel B to be as shallow as 2.3 feet to 4 feet bgs.

Since reuse of Parcel B will include residential uses, such as housing, excavation of contaminated soil to the groundwater would not be adequately protective because during the 1997-98 rainy season, depths to groundwater beneath Parcel B were measured as shallow as 2.3 to 4 feet bgs. Further, the institutional controls outlined in the Parcel B ROD would no longer be protective of construction workers during redevelopment of the property. This is because if the redeveloper believes that all soils below the groundwater table have been cleaned up and the groundwater table fluctuates and exposes soils that have not been cleaned up, the workers could be exposed to residual contaminated soils while believing they are protected as long as they do not dig into the saturated zone.

This ESD revises the Parcel B ROD to include cleanup of contaminated soils to a cleanup level of 10^{-6} cancer risk (residential) or to a maximum depth of 10 feet bgs to ensure that the Parcel B remedy is protective of human health in both the short and long term.

IV. Support Agency Comments

In a letter dated June 26, 1998, the State of California Regional Water Quality Control Board concurred with this ESD for Parcel B. The BRAC Cleanup Team (BCT) representative for the State of California Department of Toxic Substances Control for the Hunters Point Site reviewed the Draft ESD for Parcel B and only had minor comments, all of which are addressed in this Final ESD for Parcel B.

V. Affirmation of the Statutory Determinations

It is the determination of the Navy, the EPA, and the State of California that this modified remedy continues to satisfy the statutory requirements of cleanup under the Superfund process. Considering the information that has been developed during implementation of the remedy and the proposed changes to the selected remedy, the Navy, the EPA, DTSC and the RWQCB believe that the remedy will remain protective of human health and the environment, will comply with Federal and State requirements that are applicable or relevant and appropriate to this remedial action, and will be cost effective. In addition, the revised remedy will continue to use permanent cleanup solutions for the Site to the maximum extent practicable. However, the revised remedy still does not satisfy the statutory preference for remedies that employ treatment to reduce toxicity, mobility and volume as a principal element. This is due to numerous comments received during the public comment period voicing strong opposition to on-site treatment and disposal contaminated soils, the alternative initially proposed by the Navy in its Proposed Plan for the Parcel B contaminated soils. In response to community concerns, the Navy selected excavation and off-site disposal for the Parcel B contaminated soils.

VI. Public Participation Activities

The Administrative Record for this Site is available for review and comment by any member of the public at the two information repositories mentioned in Section I of this ESD. No public meetings are proposed for this ESD unless public interest indicates that such a meeting is warranted. However, the Navy intends to discuss this ESD for Parcel B with the Restoration Advisory Board for Hunters Point Shipyard at its next scheduled meeting.

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Oct. 17, 1998

Date

10/20/98

Date

10-28-98

Date

10-16-98

Date